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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,788	04/21/2006	Nobuo Fujita	10517/320	5878

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EXAMINER	
PARSONS, THOMAS H	

ART UNIT	PAPER NUMBER
1795	

MAIL DATE	DELIVERY MODE
06/24/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/576,788	FUJITA, NOBUO	
	Examiner	Art Unit	
	THOMAS H. PARSONS	1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 April 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,4-6,13 and 14* is/are rejected.

7)☒ Claim(s) *2,3 and 7-12* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 April 2009* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *04/21/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:

page 14, paragraph [0046], line 1, suggest changing "FIG. 3" to --FIG. 4--.

Appropriate correction is required.

Claim Objections

2. Claims 4-5 and 7 are objected to because of the following informalities:

claim 4, line 6, suggest changing "detecting means" to --detecting portion--. Claim 5 is objected to as being dependent upon claim 4.

Claim 7, line 6, suggest changing "determining means" to --determining portion--.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1, 4-6 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ueda et al. (US 7,264,900).

Claim 1: Ueda et al. in Figure 1 disclose an abnormality detecting device of a fuel cell system, comprising:

a hydrogen off-gas circulation passage (34) for making hydrogen off-gas discharged from a fuel cell flow back to an anode of the fuel cell;

a discharge passage (36) for discharging part of the hydrogen off-gas, which is circulated through the hydrogen off-gas circulation passage, from the hydrogen off-gas circulation passage;

hydrogen discharge valve (6) provided in the discharge passage; and

an abnormality determining portion (ECU 40) for determining whether an abnormality has occurred in opening/closing of the hydrogen discharge valve (see also Figure 3 which discloses a hydrogen discharge permission determining process routing that obviously would provide the claimed abnormality determining portion), further comprising

a gas state quantity detecting portion (45) for detecting a gas state quantity of the hydrogen off-gas, the gas state quantity detecting portion being provided in the discharge passage at a position downstream from the hydrogen discharge valve, wherein the abnormality determining portion determines whether an abnormality has occurred in opening/closing of the hydrogen discharge valve based on the gas state quantity of the hydrogen off-gas (col. 3: 11-col. 5: 11).

Claim 4: Ueda et al. further disclose that the hydrogen discharge valve is an electromagnetic valve, and the abnormality determining portion determines whether an abnormality has occurred in opening/closing of the hydrogen discharge valve based on the gas state quantity detected by the gas state quantity detecting portion (45) so as to deal with a change in an input of an opening/closing control signal to the electromagnetic valve.

Claim 5: Ueda et al. further disclose that the abnormality determining portion (40) determines whether an abnormality has occurred in opening/closing of the electromagnetic valve (36) based on a change with time in the gas state quantity detected by the gas state quantity detecting portion so as to deal with the change in the input of the opening/closing control signal to the electromagnetic valve.

Claim 6: Ueda et al. further disclose that the gas state quantity is a physical quantity related to a hydrogen concentration.

Claim 13: Ueda et al. in Figures 2 and 3 disclose a portion for dealing with a failure when the abnormality determining portion detects an abnormality in opening/closing of the hydrogen discharge valve.

Claim 14: Ueda et al further disclose that the gas state quantity detecting portion (45) is provided in the discharge passage at a position outside the hydrogen off-gas circulation passage.

Allowable Subject Matter

5. Claims 2-3 and 8-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Claim 7 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Examiner Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THOMAS H. PARSONS whose telephone number is (571)272-1290. The examiner can normally be reached on M-F (7:00-3:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pat Ryan can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/PATRICK RYAN/
Supervisory Patent Examiner, Art Unit 1795

Thomas H Parsons
Examiner
Art Unit 1795

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